

Technology Planning Tool - Planning Guide

Introduction

The Technology Planning Tool (TPT) is broken into four phases. Each phase asks respondents to create goals categorized by “goal types.” Goal types are organizational placeholders used to categorize goals addressing similar areas (e.g., Improving Teaching and Learning, Developing Policy, etc.). There are a total of ten goal types provided within the TPT; however respondents may always insert their own goal type by choosing “Other.”

Please keep the following descriptions and explanations of the ten goal types found within the four phases of the Technology Planning Tool in mind as you prepare your plan.

Goal Type Descriptions

1. *Improving Teaching and Learning*—Goals aimed at enhancing the performance of learners and/or instructors. Examples would include educational technologies and/or professional development activities selected/created to improve performance in targeted curricular areas.
2. *Technology Alignment to Curriculum*—Goals aimed at ensuring state technology standards are aligned with district curriculum.
3. *Developing Policy*—Goals aimed at establishing guidelines for the use of educational and/or administrative technologies. When creating policies for technology within your organization, it is important to think broadly of needed policies. Consider the following:
 - A. Research and evaluation
 - B. Bring your own technology
 - C. Access to technology
 - D. Data usage
 - E. Technology acquisition
 - F. Technology funding
 - G. Acceptable use
 - H. Information exchange and collaboration
4. *Providing District Leadership*—Goals aimed at actions administrators can take to promote and enhance the use of educational technology to improve the performance of all members of the educational community. Instructional leadership at a district level proves critical in the use of technology in teaching and learning. When using this goal, consider:
 - A. Instructional leadership
 - B. Competencies
 - C. Advocacy for technology

- D. Professional development
- E. Support for educational technology
- F. Professional practice
- G. Measures and accountability
- H. Teacher evaluation

5. *Networking, Internet and Telecommunications*—Goals aimed at addressing infrastructure and bandwidth necessary to support the technologies in use by the district for administrative and instructional computing.
6. *Access to Technology*—Goals aimed at improving student and teacher access to educational and administrative technologies. Access to technology must take into account the provision of programs and services for all students, including assistive and adaptive technology. To allow effective teaching that ensures the development of successful learners, every organization must guarantee accommodation and access to technology for all students.

Additionally, this goal type addresses the importance of ongoing, planned integration of emerging technologies into your organization. An important component of the introduction of new technology is the organization's plan regarding the selection, pilot, evaluation and roll-out of that technology. Undisciplined procedures can lead to increased long-term costs, bad requirement fits and a general sense of confusion about the organization's technology plan.

7. *Access to Educational Information and Applications*—Goals aimed at enhancing access to information systems and applications that improve education. Numerous educational information systems, applications, and electronic and management resources can be provided to a variety of stakeholders. These systems can be used to support communication between and among stakeholders, foster community and parent involvement, assess and evaluate student performance and academic needs, facilitate local, State and Federal reporting processes, and provide professional development and student learning opportunities. These systems often house vast amounts of data. In order to support the educational process, it is critical that these systems be configured so that the data can be accessed by stakeholders to guide and support standards-based instruction, student achievement and educational decision-making.
8. *Security*—Goals aimed at ensuring educational technologies, particularly information systems are protected from malware, abuse, neglect or misuse. In this context, we can characterize security along three dimensions:

- **System Availability** - Making sure the organization's systems are operational. Out-of-service systems have potentially huge indirect costs. Non-traditional threats, like spam and spyware, have become security issues, as they threaten an organization's system availability and, by extension, the ability to conduct business.
- **System Access** - Making sure the correct people have access to information and functionality when they need it. Additionally, it means keeping individuals without authorization out of the system. Ubiquitous network access makes the security of the enterprise only as good as the least secure system.
- **Information integrity and privacy** - Ultimately, an organization's information is more valuable than the system it exists in, therefore, regularly scheduled system backups are necessary. Additionally, with Family Educational Rights and Privacy Act (FERPA) and the Children's Internet Protection Act (CIPA), organizations have a fiduciary responsibility to ensure student information is not accessible by unauthorized personnel and/or entities.

9. **Technology Support and Management**—Goals aimed at ensuring educational technologies are adequately maintained, supported and managed. An effective support plan is necessary to ensure users' access to computing technologies, maintain capital investments and facilitate the seamless integration of technology into the classroom. There are numerous contributing factors to the overall support of an organization's infrastructure and technology. Some of these factors include: time to resolve problems or issues; the ratio of support staff for students, teachers, buildings and computers; and efficiencies based upon different support models and software to assist in monitoring and tracking issues.

The number of support staff, both paid and volunteer, as well as the average time to problem resolution, is one of the largest contributing factors to an organization's overall support infrastructure. In addition, the end-users (e.g. teachers) must perceive the offerings to be 'effective' and easy in order to continue to utilize and believe in the technology. In addition, the end-users (students, teachers and administrators) require in-service to ensure comfort of use.

10. **Total Cost of Ownership**—Goal aimed at determining the true overall cost of educational technologies in support of accurate planning and budgeting. An integral component of a comprehensive technology plan, especially in regards to infrastructure, is the effective application of the concept of Total Cost of Ownership (TCO). This idea states that the true cost of a technological system is more than just the initial product purchase. All phases of a system's lifecycle count toward the fully burdened cost that an

organization encounters when selecting a particular component. While purchase costs are a significant factor, other components contribute to the true cost: acquisitions, deployment, ongoing support (maintenance/repairs) and retirement.

Organizations that embrace TCO as an indicator of a product's "true" cost, in general, spend less money, as they are aware of all factors involved. They realize that certain choices in one phase may have a tangible effect on a later phase. This effect could range from additional, unplanned costs to the ineffective use of the new technology due to lack of training or resources.

As you are generating goals for TCO, center on a thoughtful approach and consider:

- How important of a factor is it in your decision-making?
- Are all ramifications of technology choices being considered?
- Is there a plan for ongoing evaluation of your current cost contributors? (e.g. purchase, installation, extended warranty vs. in-house and upgrades)

eTech Ohio Technology Plan Review Criteria

When eTech Ohio Educational Technology Consultants (ETC) review your technology plan for approval, they will evaluate using criteria focused on: 1) leveraging technology to promote the systemic improvement of Ohio's schools; 2) aligning educational technologies in support of 21st Century teaching and learning; and 3) fulfilling federal E-Rate requirements.

The following criteria and guiding questions will be used:

- **The plan must establish clear goals and a realistic strategy for using technology to improve education.**
 - What goals have you identified in your school improvement plan?
 - What accompanying strategies have been identified to reach those goals?
 - What specific technologies will be utilized in helping reach those goals?
 - What are the specific resources (e.g., trainers, selected curricular software, Internet access, links to subscribed databases, etc.) that will help improved teaching and learning?
- **The plan must include a needs assessment of the hardware, software, and other services that will be used to improve education.**
 - How was the need determined?
 - How do you identify potentially useful new technologies?

- **The plan must have a professional development strategy to ensure that staff understands how to use these new technologies to improve education.**
 - What are the specific resources and strategies that you plan to implement to ensure that your staff is ready to use technologies?
 - Who will be in charge of coordinating the professional development activities?
 - Are there in-service slots set aside for technology-related professional development?
 - Will the professional development be required for all that use it, or is it optional? If optional, what incentives exist to encourage staff to acquire these new skills?
 - What models of professional development would work in your organization to train your staff?
 - What professional development opportunities and resources exist for your technical staff?
 - Do you have the resources in-house to train these staff members or do they need to go to outside courses, or a combination of the two?
 - What financial and time resources exist to keep the staff up to date in learning about new technologies?
 - What professional development opportunities are available from outside sources (such as service providers, conferences, courses delivered via distance learning or over the Internet; courses sponsored by your ITC or ESC)?
 - What professional development opportunities and resources exist for your professional staff to ensure that they can not only use the new technologies, but to use them to deliver improved teaching and learning services?

- **The plan must include an evaluation process that enables the school to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.**
 - How frequently will you update the plan?
 - Who is responsible for updating the plan?
 - How will you determine if the technology plan was successful in meeting the goals of your institutional improvement plans (e.g., interview/survey staff and other stakeholders; measuring progress made towards benchmarks established in your goals; observations)?
 - What goals and objectives of the technology plan were you able to meet? To what extent?
 - Were there any unexpected outcomes or benefits to having the technology in place?
 - What goals and objectives of the technology plan did you not meet? Why? Are there ways to overcome these barriers?
 - What is the plan for meeting unmet goals and objectives?
 - Are there other needs that have emerged since you last wrote/revised your plan? If so, what are they?
 - Are there any goals and objectives that are no longer relevant to your situation and should be deleted from the plan?